2016 Seminar Series by Marc Zeitlin, aeronautical engineer, Cozy builder, & more





WHEN: AUG 6, 2016 9 AM to 3 PM HOST: EAA106 www.106.EAAchapter.org

WHERE: **EAA Chapter 106** hangar – North end of DELTA at LWM (Lawrence Municipal Airport)

If driving: No GPS address. 400 Holt Rd gets you close, then right at stop sign, GATE 4 on left. **Gate 4 will be manned 8 AM to 9 AM.** After that, call number on yellow post for escort in.

HOMEBUILTS: Taxi to north end of DELTA at LWM (Production a/c: Park on N. Ramp (by ECHO) at circled #s)

Marc Zeitlin will cover 5 topics on August 6 at the EAA106 hangar. NOTE: Topic times are approximate depending on audience participation, and include short breaks between topics:

0800-0900 - Breakfast -- \$5 - Pancakes, Sausages, Hash Brown, Beverage (\$10 for Breakfast & Lunch)

Ogoo − 1. Bad Judgement -- How is it possible for one person to make 13 major judgmental errors ...

1000 – 2. Holy Crap, you've actually been FLYING that thing? -- Avoid these issues in OUR aircraft

1100 – 3. <u>Tier 1B (SS2 – aka SpaceShipTwo) update</u>

(as of 2011, with verbal updates up to today, including the accident and further progress)

1200-1300 - Lunch -- \$7 - 1/3lb Sirloin Burger, 1/4lb HotDog, Chips, Beverage (option: veggie or turkey burgers)

1300 - 4. Prop Loss, Desert Center -- the propeller decided to take a different route to the ground

1400 – **5. Belleville Washer Installation & Testing** -- for those of us with wood & composite propellers

SEMINAR DETAILS NEXT PAGE !!!

About the SPEAKER:

Marc Zeitlin is an internationally known aeronautical engineer. He has built two aircraft - a Quickie Q2 and his current aircraft, a COZY MKIV, with over 1250 hours on it (which he will fly to this event). He started and has administered the COZY mailing list since 1995 and for 4 years was the official COZY support engineer for Aircraft Spruce (he continues to provide this support on an unpaid basis). Marc also gives the COZY forum at OSHKOSH each year.

After losing his prop on a trip from the East Coast to California (see the fourth presentation, Prop Loss, Desert Center), Marc resurrected, reengineered, and made widely available a spreadsheet and other information on the selection and use of Belleville Washers for the retention of wood and composite propellers.

Once he finally made it out to Mojave, Marc worked for Scaled Composites for 6.5 years, running the Tier 1B (SS2) rocket motor program for 3 of those years. After Scaled, Marc was the lead Systems Engineer for ICON aircraft. This lasted one year (see the first presentation on "judgment") after which Marc resurrected the moribund company he had started in 1983 known worldwide as Burnside Aerospace. At BA, Marc does a minimal amount of engineering, mostly spending his days working on canard (and some other EAB) aircraft. He does upgrades, repairs, panel replacements, maintenance, Pre-Buy examinations, and with his A&P certificate also performs Condition Inspections. His stress levels are far lower now than when he was a full time engineer.

Seminar Series by Marc Zeitlin, aeronautical engineer & Cozy Builder/Pilot -- DETAILS:

(AUGUST 6, 2016 -- see prior page for location, etc)

This will be a FAASafety.gov WINGS seminar

https://www.faasafety.gov/SPANS/event_details.aspx?eid=70139 Please register if you want WINGS credits. It also helps our chair count.

Marc Zeitlin will cover 5 topics on August 6 at the EAA106 hangar.

NOTE: Topic times are approximate depending on audience participation.



1. 0900 - Bad Judgement

Synopsis:

How is it possible for one person to make 13 major judgmental errors on a cross-country trip and live to tell about it? Find out in this gripping saga of a fool, his airplane and how he's not actually any different from you, as much as you'd like to think that he is.

2. 1000 - Holy Crap, you've actually been FLYING that thing?

Synopsis:

1/2 of everything is below average, by definition (Not you, of course - just the guy sitting next to you, on the right). Let's see some of what the bottom half of the EAB aircraft population build/maintenance quality looks like, so we can try VERY hard to avoid these issues in OUR aircraft (none of which, of course, are below average here in Lake Wobegon).

3. 1100 – Tier 1B (SS2 – aka SpaceShipTwo) update

(as of 2011, with verbal updates up to today, including the accident and further progress)

Synopsis:

A survey of the SS2/WK2 program development and issues. We'll cover the Spaceship, Mothership and Rocket Motor development, as well as the two accidents and Virgin Galactic's current program status. (Marc worked for Scaled Composites for 6.5 years, running the Tier 1B (SS2) rocket motor program for 3 of those years.)

Lunch break

4. 1300 – Prop Loss, Desert Center

Synopsis:

Anatomy of an emergency. While flying from CA to Phoenix, the propeller on our COZY MKIV decided to take a different route to the ground than the rest of the aircraft. We'll discuss previous flights, actions during the emergency flight, and a post-mortem of the root cause of the prop loss.

5. 1400 - Belleville Washer Installation and Testing

Synopsis:

There has to be a better way. After our prop loss, research indicated that this event is hardly as uncommon as we'd all like it to be (for those of us with wood and composite propellers - you metal prop guys can go get a beer). I resurrected an old solution to the problem and have been attempting to popularize it. For reasons not entirely clear, this solution had fallen out of favor (Like leeches - why don't we bleed people with leeches anymore? It was a wonderful cure... Or phrenology - I miss the good old days).

Reference LINKS: Cozy Builder Forums: www.cozybuilders.org

Burnside Aerospace: www.burnsideaerospace.com